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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,599

03/09/2004

Weishi Feng

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EXAMINER

SAN JUAN, MARTINJERIKO P

ART UNIT

PAPER NUMBER

2132

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,599	Applicant(s) FENG, WEISHI	
	Examiner MARTIN JERIKO P. SAN JUAN	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 4/3/08 and 5/9/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Gilberto Barron Jr/
Supervisory Patent Examiner, Art Unit 2132.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-21, 23-79, and 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims III [US PN 6550011 B1], and further in view of Searle [US 6683954 B1].

Art Unit: 2132

Based on independent claim 1, Sims III teaches an apparatus with a secure hard drive comprising a storage medium [6550011 B1, Col 13, Ln 4] that stores encrypted digital content and corresponding encrypted content keys [6550011 B1, Col 13, Ln 35]; a public key decryption module that receives one of said encrypted content keys from said storage medium and that decrypts said encrypted content key using a private key [6550011 B1, Col 12, Ln 1-4 – preselected device secret key] and generates a content key [6550011 B1, Col 11, Ln 50][6550011 B1, Col 17, Ln 62]; and a block decryption module that receives said encrypted digital content corresponding to said one of said encrypted content keys from said storage medium and said content key from said public key decryption module and that decrypts said encrypted content using said content key [6550011 B1, Col 11, Ln 50][6550011 B1, Col 18, Ln 5].

However, Sims III does not teach wherein said private key is generated based on a device specific identification (ID).

Searle teaches a private key generated based on a device specific identification (ID) [Searle 5: 34-64].

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the private key of Sims III using a device specific identification (ID) as taught by Searle. The suggestion/motivation for combining would have been to generate keys for fraud prevention [Searle 2: 13-33]. Sims III and Searle are analogous art because it solves the problem of generating a more secure private key that addresses fraud prevention.

Art Unit: 2132

With regard to dependent claim 2, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1, where in said storage medium is a magnetic storage medium [6550011 B1, Col 13, Ln 5][Magnetic, per se, is inherent within the scope of writeable media].

With regard to dependent claim 3, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1, wherein said public key decryption module and said block decryption module are implemented by a system on chip (SOC) [6550011 B1, Col 14, Ln 12].

With regard to dependent claim 4, Sims III teaches the secure hard drive of claim 1 further comprising a content player that receives said decrypted digital content from said block decryption module and that generates at least one of an analog output signal and a digital output signal [6550011 B1, Col 6, Ln 52], and a public key decryption module [6550011 B1, Col 11, Ln 50 -- encryption/decryption engine] that uses a private key [6550011 B1, Col 12, Ln 1 -- device preselected secret key] to generate said content key based on said private key [6550011 B1, Col 12, Ln 20].

Sims III does not teach the secure hard drive further comprising: an identification ID module that provides said specific device ID, wherein said public key decryption module generates said private key using said device specific ID.

Searle teaches an ID module that provides said specific device ID, wherein said public key decryption module generates a private key using a device specific identification (ID) [Searle 5: 34-64].

Art Unit: 2132

It would have been obvious to one of ordinary skill in the art at the time of invention to generate the private key of Sims III using a device specific identification (ID) as taught by Searle. The suggestion/motivation for combining would have been to generate keys for fraud prevention [Searle 2: 13-33]. Sims III and Searle are analogous art because it solves the problem of generating a more secure private key.

With regard to dependent claim 5, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1 further comprising a controller that performs buffer management and timing of read/write operations [6550011 B1, Col 13, Ln 5][Controllers performing buffer management and timing of read/write operations are inherent in writeable storage devices.]

With regard to dependent claim 6, the combined invention of Sims III and Searle teaches a system comprising the secure hard drive of claim 5 and further comprising an external host [6550011 B1, Col 20, Ln 8]; and a control interface that provides a communications interface between said controller and said external host [6550011 B1, Col 20, Ln 48][A control interface is inherent to enable transfer of content as cited.]

With regard to dependent claim 7, the combined invention of Sims III and Searle teaches the system of claim 6, wherein said external host is one of a computer and a portable media player [6550011 B1, Col 19, Ln 30][6550011 B1, Col 20, Ln 8].

With regard to dependent claim 8, the combined invention of Sims III and Searle teaches the hard drive of claim 4 further comprising a watermark detector that communicates with an output of said content player and that determines whether said

Art Unit: 2132

analog signal that is output by said content player contains a watermark [6550011 B1, Col 15, Ln 15].

With regard to dependent claim 9, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1, wherein said storage medium stores a content directory having content directory entries for said content [6550011 B1, Col 19, Ln 6], [6550011 B1, Col 13, Ln 22].

With regard to dependent claim 10, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9, wherein said public key decryption module performs digital signature verification of said content directory entry corresponding to said content that is selected for play [6550011 B1, Col 15, Ln 48-60].

With regard to dependent claim 12, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9 wherein at least one of said content directory entries includes a content distributor ID field that identifies a content distributor supplying said corresponding content [6550011 B1, Col 13, Ln 25].

With regard to dependent claim 13, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9 wherein at least one of said content directory entries includes a content status field that has one of an active status and a passive status, wherein said active status enables playback and said inactive status disables playback [6550011 B1, Col 15, Ln 5].

With regard to dependent claim 14, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9 wherein at least one of said content directory

Art Unit: 2132

entries includes a signature field for said content distributor supplying said corresponding content [6550011 B1, Col 13, Ln 25].

With regard to dependent claim 15, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9 wherein at least one of said content directory entries includes a content key location field that contains a first offset value that points to a content key for said selected content in a content key block stored on said storage medium [6550011 B1, Col 13, Ln 22][Pointers as offset values are inherent in these data sets cited for the purpose of pointing to a content key.]

With regard to dependent claim 16, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9 where in at least one of said content directory entries includes a content location field that contains a second offset value that points to said selected content in a encrypted content block stored on said storage medium [6550011 B1, Col 19, Ln 6][Pointers as offset values are inherent in a file system for the purpose of pointing to a selected content.].

With regard to dependent claim 17, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1 wherein said content includes at least one of audio, video, and still pictures [6550011 B1, Col 7, Ln 62].

With regard to dependent claim 18, the combined invention of Sims III and Tai teaches the system of claim 6 further comprising a distributed communications network [Col 9, Ln 13]; and a content distributor that transmits encrypted content, an encrypted content key, and a content directory entry for a content selection to said secure hard drive via

Art Unit: 2132

said external host and said distributed communications network [Col 20, Ln 2][A content distributor is inherent in a “pay per view” system.]

With regard to dependent claim 19, the combined invention of Sims III and Searle teaches the secure hard drive of claim 1, wherein said storage medium contains encrypted content that is pre-stored thereon [6550011 B1, Col 20, Ln 55].

Independent claim 20 is rejected using the same references as claims 1, 2, and 3.

Dependent claim 21 is rejected using the same reference as claim 4 with the limitation regarding a content player that receives said decrypted digital content.

Dependent claim 23, 24, 25, 26, and 27 are rejected using the same reference as claim 5, 6, 8, 9, and 10 respectively.

Dependent claim 28 is rejected using the same references as claims 11, 12, 13, 14, 15, and 16.

Dependent claim 29, and 30 are rejected using the same reference as claim 17, and 18 respectively.

Claims 31-40, and 42-49 are rejected using the same references as claims 1-10, and 12-19. Claims 1-10, and 12-19 is the apparatus with all limitations having the necessary structure and components as disclosed in the specification for performing the function recited in all the limitations of claims 31-40, and 42-49.

Claims 50-60 are rejected using the same references as claims 20-30. Claims 20-30 is the apparatus with all limitations having the necessary structure and components as disclosed in the specification for performing the function recited in all the limitations of claims 50-60.

Art Unit: 2132

Claims 61-77 are rejected using the same references as claims 1-6, 8-10, 12-17, and 19. Claims 1-6, 8-10, 12-17, and 19 is the apparatus with all limitations performing the method of claims 61-67, and 69-77.

Claim 78-79, and 81-83 are rejected because it contains the same subject matter as claim 4. [Chip ID is intrinsic to the device where the chip is being utilized.]

3. Claim 80 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims III [US PN 6550011 B1], and further in view of Searle [US 6683954 B1] and Heer et al [US PN 5999629].

Regarding claim 80, the combined invention of Sims III, and Searle teach the secure hard drive of claim 78, wherein said public key decryption module generates said content key based on a public key [US 6550011 B1, Col 12, Ln 17 – Content key is encrypted using device's public key, which is decrypted using device's secret key].

However the combined invention of Sims III and Tai do not teach wherein said public key decryption module generates a public key based on said private key.

Heer teaches a security module that generates a corresponding public key based from a device's private key [5999629, Col 4, Ln 34-51]

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify the encryption/decryption engine of the combined invention of Sims III and Tai so that a corresponding public key can be generated from said private key. The suggestion/motivation for combining would have been to cover the device's secret key [5999629, Col 1, Ln 30-40] through the utilization of asymmetric cryptographic keys.

Heer is analogous art because it solves the problem of not revealing the device's secret key in the communication channels.

Dependent claim 22 is rejected using the same reference as claim 80 because it contains the same subject matter since the public key is generated from the private key from which is generated using the Chip ID.

4. Claims 11, 41, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims III [US PN 6550011 B1], and further in view of Searle [US 6683954 B1] and Nishimoto et al. [US 7380135 B2], hereinafter Nishimoto.

With regard to dependent claim 11, the combined invention of Sims III and Searle teaches the secure hard drive of claim 9.

Sims in view of Searle does not teach wherein at least one of said content directory entries contains a clear content counter that specifies a portion of said corresponding content that is not encrypted [6550011 B1, Col 15, Ln 7].

Nishimoto teaches a directory entry that contains a clear content counter that specifies a portion of said corresponding content that is not encrypted [Nishimoto 3: 46-64].

It would have been obvious to one of ordinary skilled in the art at the time of invention to modify Sims III in view of Searle to include a content directory entry that contains a clear content counter as taught by Nishimoto. The suggestion/motivation would have been to achieve previewing portions of an encrypted content [Nishimoto 2: 42-49]. Nishimoto is analogous art because it solves the problem for providing for previewing portions of an encrypted content.

Claims 41, and 68 are rejected because it is similar matter to claim 11.

Art Unit: 2132

Dependent claim 28 is rejected using the same references as claims 11, 12, 13, 14, 15, and 16.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN JERIKO P. SAN JUAN whose telephone number is (571)272-7875. The examiner can normally be reached on M-F 8:30a - 6:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MJSJ/

Martin Jeriko San Juan
Examiner, Art Unit 2132

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2132